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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

DATE: December 11, 2000

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ATTORNEY DOCKET NO.

40868/DBP

U.S. APPLICATION NO.

N/A

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

INTERNATIONAL APPLICATION NO  
**PCT/DE99/01696**INTERNATIONAL FILING DATE  
**4 JUNE 1999**PRIORITY DATE CLAIMED  
**11 JUNE 1998**

TITLE OF INVENTION

**DEVICE FOR CONNECTING AN EXTERIOR HANDLE TO A CLOSING SYSTEM**

APPLICANT(S) FOR DO/EO/US

**BUCKER, Rolf; PLEISS, Eberhard**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/LUS).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☒ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items below concern other document(s) or other information included:**

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A FIRST preliminary amendment.  
☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☐ SMALL ENTITY Assertion: Applicant(s) and any others associated with it/them under 37 CFR § 1.27(a) are a small entity.
17. ☒ International search report.
18. ☒ International preliminary examination report.
19. ☐
20. ☐
21. ☐

U.S. APPLICATION NO. (If known, see 37 CFR 1.5) N/A <b>09/719411</b>		INTERNATIONAL APPLICATION NO. PCT/DE99/01696		ATTORNEY DOCKET NO. 40868/DBP	
<input checked="" type="checkbox"/> The following fees are submitted: (see Note (1) below) <b>Basic National Fee (37 CFR 1.492(a)(1)-(5)):</b> Search Report has been prepared by the EPO or JPO ..... <b>\$860.00</b> International preliminary examination fee paid to USPTO (37 CFR 1.482) ... <b>\$690.00</b> No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) ..... <b>\$710.00</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... <b>\$1,000.00</b> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) ..... <b>\$100.00</b>  <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				<b>CALCULATIONS</b>	<b>PTO USE ONLY</b>
				<b>\$ 860</b>	
Surcharge of <b>\$130</b> for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				<b>\$</b>	
<b>Claims</b>	<b>Number Filed</b>	<b>Number Extra</b>	<b>Rate</b>		
Total Claims	<b>12+1 -20=</b>	<b>0</b>	<b>X \$18</b>	<b>\$</b>	
Independent Claims	<b>1 -3=</b>	<b>0</b>	<b>X \$80</b>	<b>\$</b>	
Multiple dependent claim(s) (if applicable)			<b>+ \$270</b>	<b>\$ 270</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$ 1130</b>	
Reduction by 1/2 for filing by small entity, if applicable. Verified Small entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28).				<b>\$</b>	
<b>SUBTOTAL =</b>				<b>\$ 1130</b>	
Processing fee of <b>\$130</b> for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				<b>\$</b>	
<b>TOTAL NATIONAL FEE =</b>				<b>\$ 1130</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00</b> per property				<b>\$ 40</b>	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 1170</b>	
<b>Note (1):</b> The basic national fee must be paid when filing this application. The 20-month time limit (37 CFR § 1.494) and 30-month time limit (37 CFR § 1.495) are not extendable.				Amount to be: refunded	<b>\$</b>
				charged	<b>\$</b>
a. <input checked="" type="checkbox"/> A check in the amount of <b>\$ 1130.00 and \$ 40.00</b> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>03-1728</u> . A duplicate copy of this sheet is enclosed.					
<b>NOTE (2):</b> Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO:					
<b>D. Bruce Prout</b> <b>CHRISTIE, PARKER &amp; HALE</b> <b>P.O. Box 7068</b> <b>Pasadena, CA 91109-7068</b>  <b>CUSTOMER NUMBER: 23363</b>					
By <u><i>D. Bruce Prout</i></u> <b>D. Bruce Prout</b> <b>Reg. No. 20,958</b>					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

EXPRESS MAIL NO. EL483387365US

Applicant : Rolf Bucker, et al.  
Filed : December 11, 2000  
Title : DEVICE FOR CONNECTING AN EXTERIOR HANDLE  
TO A CLOSING SYSTEM  
Docket No. : 40868/DBP/M521

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Post Office Box 7068  
Pasadena, CA 91109-7068  
December 11, 2000

Commissioner:

Please amend the above-identified application as follows:

IN THE CLAIMS:

*NE* Claim 4, line 1, delete "or 3".

Claim 5, lines 1 and 2, delete "at least one of the preceding claims", and insert --claim 1--.

Claim 6, lines 1 and 2, delete "at least one of the preceding claims", and insert --claim 1--.

Claim 7, lines 1 and 2, delete "at least one of the preceding claims", and insert --claim 1--.

Claim 8, lines 1 and 2, delete "at least one of the preceding claims", and insert --claim 1--.

Claim 9, lines 1 and 2, delete "at least one of the preceding claims", and insert --claim 1--.

Claim 10, lines 1 and 2, delete "at least one of the preceding claims", and insert --claim 1--.

Claim 12, lines 1 and 2, delete "at least one of the preceding claims", and insert --claim 1--.

REMARKS

In view of the foregoing amendments, consideration and allowance of this application is respectfully requested.

Respectfully submitted,  
CHRISTIE, PARKER & HALE, LLP

By *D. Bruce Prout*  
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626/795-9900

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Device for connecting an exterior handle to a closing system

### Description

20 The invention relates to a device for opening wings of a  
motor vehicle, more particularly for opening vehicle doors  
and vehicle hinged lids, according to the preamble of claim  
1.

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Device for connecting an exterior handle to a closing  
system

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**Description**

20

The invention relates to a device for connecting an exterior handle mounted on the exterior skin of a motor vehicle to a closing system, more particularly for vehicle doors and vehicle hinged lids, according to the preamble of claim 1.

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From DE 44 05 383 A1 an exterior handle assembly for a motor vehicle door is known having a bearing yoke which can be prefitted on the inside of the door exterior panel and in which are installed a draw bar separated from the door handle and acting on a lock release lever, as well as a holding plate for a closing cylinder. The door handle which is loaded with spring force, and the closing cylinder

are able to be mounted from outside by means of a detent device when the door is closed. For assembly three openings are provided, namely a bearing opening for mounting the door handle, an operating opening for  
5 connecting the door handle to the draw bar as well as a closing opening for the closing cylinder.

The known exterior handle assembly has a number of complicated individual parts so that the cost of  
10 manufacturing and assembling the known exterior door assembly is really quite high. Furthermore there is the drawback that the known assembly takes up a lot of room in the space between the exterior panel of the door and the interior panel. Furthermore the assembly has a relatively  
15 large number of openings in the exterior panel of the door which have to be sealed at high cost in order to prevent damp from penetrating into the space between the interior and exterior panels of the door.

20 Furthermore in order to connect the exterior handle assembly to the locking system (door lock) there are always at least three assembly steps which are required: first the draw bar which acts on the lock release lever has to be pre-assembled. Then in individual assembly steps each the  
25 door handle is connected to the draw bar and the closing cylinder is connected to the locking system.

~~The object of the invention is therefore to provide a device for connecting an exterior handle mounted on the  
30 exterior skin of a motor vehicle to a closing system which is simple and cost-effective to manufacture and which can be fitted at low cost.~~

New description  
26.06.00

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- 5 The object of the invention is therefore to provide a device for opening wings of a motor vehicle which is simple and cost-effective to manufacture and which can be fitted at low cost.
- 10 This is achieved according to the invention through a device with the features of claim 1.

The device according to the invention has the advantage that an exterior handle of a wing, e.g. a door, and a connecting  
15 element which can be inserted from the exterior skin of a motor vehicle can be brought into interaction with each other so that the exterior handle and the connecting element are mutually entrained. By way of example when the exterior handle is operated to open a vehicle door the exterior handle  
20 entrains the connecting element. During the reverse procedure the connecting element then entrains the exterior handle. The connecting element thereby serves as a connection between the exterior handle and a closing system of the door.

- 25 The device according to the invention furthermore has a small number of individual parts which can be manufactured without complication and at low cost. Furthermore the small number of parts and their simple method of construction enables a low-cost assembly. More particularly it is possible by means  
30 of an individual assembly step to connect the exterior handle to the closing system fixed inside a bodywork chamber. By closing system is meant here a door lock with its individual components.

**AMENDED PAGE**

This is achieved according to the invention through a device with the features of claim 1.

5 The device according to the invention has the advantage that an exterior handle of a door and a connecting element which can be inserted from the exterior skin of a motor vehicle can be brought into interaction with each other so that the exterior handle and the connecting element are mutually entrained. By way of example when the exterior  
10 handle is operated to open a vehicle door the exterior handle entrains the connecting element. During the reverse procedure the connecting element then entrains the exterior handle. The connecting element thereby serves as a connection between the exterior handle and a closing system  
15 of the door.

The device according to the invention furthermore has a small number of individual parts which can be manufactured without complication and at low cost. Furthermore the  
20 small number of parts and their simple method of construction enables a low-cost assembly. More particularly it is possible by means of an individual assembly step to connect the exterior handle to the closing system fixed inside a bodywork chamber. By closing system  
25 is meant here a door lock with its individual components.

Furthermore the space required by the device is small so that it can be installed without problem in particular in doors having a small structural space. Furthermore there  
30 is the special advantage that the device for connecting the exterior handle to the closing system enables fitting to be carried out from the outside of the door. In this way assembly is particularly easy and simple. It is also ensured that a door which is already painted no longer  
35 becomes scratched during the assembly.



- According to the invention the connecting element is mounted displaceable on an insert part which can be inserted from the exterior skin of the vehicle door and can be fixed relative to the exterior skin. This insert part
- 5 preferably has a closing cylinder for manually actuating the closing system. As an alternative or in addition the insert part has an infrared receiver of an infrared control for automatically actuating the closing system.
- 10 In a further development of the invention the insert part has an illumination unit. This makes it easier to actuate the closing system manually by means of the closing cylinder in darkness.
- 15 A rotatable paddle of the closing cylinder mounted in the insert part is preferably in engagement with a follower of the closing system. By operating the closing cylinder the paddle of same is moved so that a blocking element of the closing system is unlatched or locked.
- 20 A compression spring is preferably supported between the insert part and the connecting element for spring-tensioning the exterior handle. This compression spring serves to reset the exterior handle and connecting element.
- 25 It is thus not necessary to provide a separate individual return spring for each of the exterior handle and connecting element. Furthermore the compression spring restricts at the same time the setting path of the exterior handle. As an alternative or in addition to the

compression spring described it is proposed to tension the exterior handle through a spring with a handle shell of the vehicle door.

- 5 The advantage of these spring arrangements is that by deliberately saving space the entire assembly becomes more compact and the manufacturing costs are reduced through the lower number of component parts.
- 10 In a further development of the invention the insert part can be fixed relative to the exterior skin through an opening in the interior skin. By way of example fixing is carried out by a positive locking connection between the insert part and handle shell.
- 15 The connection between the blocking element and the connecting element is preferably produced by snap-fitting or detent elements. By way of example a detent element is provided on the blocking element and engages in a detent opening of the connecting element. As an alternative or in addition to this it is proposed that the connection between the blocking element and connecting element is undertaken by a separate part which can be actuated through the interior skin of the vehicle door, for example an actuating element which acts on the blocking element. For this the interior skin has an assembly and dismantling opening for producing and disengaging the connection between the connecting element and closing cylinder.
- 20
- 25
- 30 In a further development of the invention the blocking element is designed as a locking pawl which interacts with a rotary spring bolt of the door lock provided as the closing system. The locking pawl prevents the movement of

the rotary spring bolt when the vehicle door is closed. By actuating the exterior handle the locking pawl is moved so that it releases the rotary spring bolt and the vehicle door can be opened through rotation of the rotary spring bolt with further actuation of the exterior handle.

The idea on which the invention is based will now be explained in further detail with reference to the embodiments illustrated in the drawings in which:

10

Figure 1 is a perspective view of a section of a motor vehicle body with a vehicle door;

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Figure 2 shows a diagrammatic partial sectional view of an exterior handle of the vehicle door according to Figure 1 connected to a door lock;

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Figures 2a/b show views according to Figure 2 with fastening devices for an insert part;

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Figure 2c shows a diagrammatic partial sectional view of the exterior handle connected to the door lock and an infrared receiver mounted in the insert part;

Figure 2d shows a diagrammatic partial sectional view of the exterior handle connected to the door lock and tensioned with a handle shell;

Figure 3 shows a perspective view of the insert part with a closing cylinder and connecting element; and

- 5 Figure 4 shows a further development of the insert part with the closing cylinder and connecting element according to Figure 3.

10 Figure 1 shows an opened vehicle door 1 on which a window pane 2 is mounted. The vehicle door 1 has an exterior handle assembly 3 with exterior handle 31, an insert part 32 as well as a closing cylinder 32'. The closing cylinder 32' is thereby mounted in the insert part 32. Both the insert part 32 and exterior handle 31 are able to be  
15 mounted from the outside of the door.

The closing cylinder 32' serves to lock and unlatch a locking pawl or rotary spring bolt 6 of the door lock 5 by actuation of a locking system (not shown). When the  
20 vehicle door 1 is closed the rotary spring bolt engages round a closing element 7 mounted on the B-pillar of the vehicle body.

25 Figure 2 shows the exterior handle 31 mounted on the door exterior panel 8 of the vehicle door 1 and connected to the door lock 5. This is part of the exterior handle arrangement 3 which is provided for operating the aforementioned locking pawl, rotary spring bolt 6 and locking of the door lock 5 and is fitted into the end of  
30 the vehicle door 1 directed towards the B-pillar. The locking pawl and rotary spring bolt 6 are not shown in Figure 2.

The door exterior panel 8 of the vehicle door 1 is assigned a door interior panel 9 which are both provided as supports for various assemblies and modules, such as for example electric window lifter. On the door exterior panel 8 is a  
5 handle shell 33 into which the exterior handle 31 is inserted and supported to swivel about a bearing 34. Thus the exterior handle 31 can be swivelled up out of the starting position shown by lifting its operating end which is opposite the bearing 34.

10

A holding fixture 31' formed in one piece on the exterior handle 31 and holding a sliding sleeve 40 projects into an assembly opening of the handle shell 33. The sliding sleeve 40 lies on the holding fixture 31' of the exterior  
15 handle 31 both during actuation and non-actuation of the exterior handle 31. In an alternative embodiment (not shown here) it is proposed to only bring the sliding sleeve 40 into connection with the exterior handle 31 when the said exterior handle 31 is actuated.

20

Furthermore the sliding sleeve 40 is mounted displaceable on the closing cylinder 32' which is mounted in the insert part 32. As an alternative or in addition to this it is proposed to mount the sliding sleeve 40 displaceable on the  
25 insert part 32 itself, as will be explained in further detail below.

A compression spring 41 is mounted between the end of the sliding sleeve 40 resting on the exterior handle 31, or  
30 31', and the insert part 32, and completely encloses the

closing cylinder 32'. This compression spring 41 is provided as a return spring of the external handle 31 or 31', and the sliding sleeve 40, which will be described in further detail below.

5

The insert part 32 is mounted and fixed in the door exterior panel 8 so that it is secured against unauthorised removal. This security action is provided by a detent connection (not shown) of the insert part 32 with  
10 the door exterior panel 8. In order to prevent damp from penetrating into the interspace between the door exterior panel 8 and door interior panel 9 a seal (likewise not shown here) is mounted between the door exterior panel 8 and insert part 32. This is of particular advantage for  
15 the proper functioning of the electric and/or electronic elements mounted in the vehicle door 1, such as for example sensors of a central locking system. In addition further seals (not shown in further detail) are provided between the exterior handle 31 and door exterior panel 8 and the  
20 handle shell 33.

The closing cylinder 32' has a paddle 35 which is in active connection with a lock follower 36 of the door lock 5 mounted on the door interior panel 9. By operating the  
25 closing cylinder 32' the paddle 35 is moved so that the locking pawl or rotary spring bolt 6 of the door lock 5 is unlatched or locked.

The door lock 5 is connected to the sliding sleeve 40  
30 through an operating lever 37 which is provided for actuating the locking pawl and rotary spring bolt 6. To this end the operating lever 37 has a detent element 39

which can lock in an opening 39' of the sliding sleeve 40. The connection between the door lock 5 and operating lever 37 is produced through a screw connection 38. As an alternative to this however any other type of connection is also possible.

The exterior handle arrangement 3 described here with its connection between the exterior handle 31 and door lock 5 has many advantages. It requires only a small number of individual parts and is therefore cost-effective to manufacture. Furthermore the assembly costs are very slight. This is due on the one hand to the small number of individual parts required and on the other to the small number of assembly steps which are necessary in order to fit the exterior handle assembly 3 into the vehicle door 1. The number of assembly steps is substantially restricted to two steps. In a first step the exterior handle 31 is inserted into the handle shell 33. Then the insert part 32 is inserted together with the closing cylinder 32' and sliding sleeve 40 into the aforementioned assembly opening and connected to the door lock 5. The sliding sleeve 40 is thereby mounted on the exterior handle 31, 31' and engaged in the door lock 5 by means of the detent connection 39, 39'. This single assembly movement thus ensures that both the insert part 32 is connected with the closing cylinder 32' and also the exterior handle 31 or 31' is connected with the door lock 5 through the sliding sleeve 40. No additional assembly step is therefore required to connect the exterior handle 31 to the door lock 5.

A further advantage lies in the small amount of space required. This is small so that the device according to the invention can be fitted particularly well in vehicle doors having a small assembly space. These are for example  
5 vehicle doors of mini-vans and also vehicle doors where a number of other modules (window lifter, speaker etc) are fitted which likewise take up a certain amount of assembly space.

10 The opening of the vehicle door 1 by means of the exterior handle assembly 3 described above will now be explained briefly. In order to open the vehicle door 1 first the locking pawl or rotary spring bolt 6 of the door lock 5 must be unlatched by actuating the closing cylinder 32'.  
15 Then by actuating the exterior handle 31 the locking pawl is moved so that the rotary spring bolt 6 is released and is turned by pulling on the exterior handle 31. The vehicle door 1 can then be opened. If the exterior handle 31 is now let go then both the exterior handle 31 and also  
20 the sliding sleeve 40 are pushed simultaneously through the single compression spring 41 into their original position. The arrangement of a second return spring is therefore not necessary. This saves further space so that the exterior handle assembly becomes further compact.

25

As mentioned above, the insert part 32 is connected and fixed to the door exterior panel 8 by means of a detent connection according to Figure 2. An alternative fixing is shown in Figures 2a and 2b.



Figure 2a shows the fixing of the insert part 32 by means of a screw connection 50 on the handle shell 33. A further possible screw connection 51 of the insert part 32 with the handle shell 33 is shown in Figure 2b. Openings 60 and 61 are provided in the door interior panel 9 for the purpose of assembling and dismantling these screw connections 50 and 51. These are readily accessible when the vehicle door 1 is opened so that the screw connection 50 and 51 can be easily assembled and dismantled without problem.

As shown in Figure 2a, a further opening 60' is provided for releasing the detent connection between the operating lever 37 and sliding sleeve 40 which is likewise readily accessible when the vehicle door 1 is opened.

Figure 2c shows the exterior handle 31 which is connected to the door lock 5 and whose associated insert part 32 has no closing cylinder but an infrared receiver of an automatic control system of the door lock 5. The infrared receiver serves to receive a control signal with which the locking pawl or rotary spring bolt 6 of the door lock 5 is unlatched and locked by means of servo motors (not shown). The embodiment illustrated here is particularly suitable for passenger doors and boot lids. For the vehicle door it is advantageous to provide the insert part 32 with both the infrared receiver of the automatic control system of the door lock 5 and a closing cylinder 31' for emergency opening of the vehicle door.

A further possible arrangement of the spring system of the exterior handle 31 is shown in Figure 2d. The exterior handle 31 is thereby tensioned with the handle shell 33 by means of a yoke spring 70 so that it is pushed after its  
5 actuation together with the sliding sleeve 40 back again into the original position prior to actuation.

Figure 3 shows on an enlarged scale a further embodiment of an insert part 32 with a closing cylinder 32' and a U-  
10 shaped connecting element 45.

A closing cylinder 32' is mounted centrally in the insert part 32 and its paddle 35 projects through an opening 45b of the connecting element 45. Furthermore the insert part  
15 32 has on either side guides 32a for guiding the guide elements 45a of the connecting element 45.

The door lock 5 (not shown here) is connected to the connection element 45 through a detent connection. For  
20 this the connecting element 45 has an opening 45c into which a detent element (not shown here) of the door lock 5 engages for connecting the door lock 5 directly to the connecting element 45.

25 The exterior handle 31 (not shown) lies in this embodiment on the stop faces 80 of the guide elements 45a. If the exterior handle 31 is actuated then the connecting element 45 is moved along the guides 32a towards the head of the insert part 32. A compression spring 41 whose arrangement  
30 is shown in Figure 4 is thereby compressed so that after actuation of the exterior handle 31 (letting go the

5 The connecting element 45 shown in Figure 4 has, unlike the connecting element shown in Figure 3, an indirect connection with the door lock 5. For this a detent element 45c is mounted on the connecting element 45 and engages in an opening 37' of the operating lever 37. This operating lever 37 is as already explained above connected to the door lock 5 and serves to actuate the locking pawl or rotary spring bolt 6 of the door lock 5.

New claims  
26.06.00

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**CLAIMS**

1. Device for opening wings of a motor vehicle with
- an exterior handle (31) mounted on the exterior
  - 10 skin (8) of a motor vehicle and loaded with spring force, and
  - a closing system (5) fixed inside a bodywork space of the motor vehicle;
- more particularly for vehicle doors and vehicle hinged-
- 15 lids,

**characterised in that**

- the exterior handle (31) has a holding fixture
- 20 (31') which can be brought into contact in an interactive manner with a connecting element (40, 45) which can be inserted from the exterior skin (8),
- that one end of the connecting element (40, 45) is
- 25 mounted displaceable on an insert part (32) which can be inserted from the exterior skin (8) and can be fixed relative to the exterior skin (8) and
- that the other end of the connecting element (40,
- 30 45) associated with the closing system (5) can be connected in active engagement with an actuating element (37) which unlatches a blocking element (6) of the closing system (5).

**AMENDED PAGE**

New claims  
26.06.2000

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- 5 2. Device according to claim 1 **characterised in that** the insert part (32) has a closing cylinder (32') and/or an infrared receiver.
- 10 3. Device according to claim 1 or 2 **characterised in that** the insert part (32) has illumination means.
- 15 4. Device according to claim 2 or 3 **characterised in that** the closing cylinder (32') engages with a follower (36) of the closing system (5) through a rotatable paddle (35).
- 20 5. Device according to at least one of the preceding claims **characterised in that** a compression spring (41) is supported between the insert part (32) and the connecting element (40, 45) to resiliently support and restrict the setting path of the exterior handle (31).
- 25
- 30 6. Device according to at least one of the preceding claims **characterised in that** the exterior handle (31) for resilient support is tensioned with a handle shell (33) through a spring (70).

AMENDED PAGE

New claims  
26.06.2000

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- 5 7. Device according to at least one of the preceding  
claims **characterised in that** the insert part (32) can be  
fixed relative to the exterior skin (8) through at least  
one opening (60, 61) in the interior skin (9).
- 10 8. Device according to at least one of the preceding  
claims **characterised in that** the insert part (32) is  
connected for positive locking engagement with the handle  
shell (33).
- 15 9. Device according to at least one of the preceding  
claims **characterised in that** the connection between the  
locking element (6) and connecting element (40, 45) is  
20 through snap or detent elements (39).
10. Device according to at least one of the preceding  
claims **characterised in that** the connection between the  
25 blocking element (6) and connecting element (40, 45) is  
through a separate connecting part (37) which can be  
actuated through the interior skin (9).
- 30 11. Device according to claim 10 **characterised in that**  
the interior skin (9) has at least one  
assembly/dismantling opening (60') for producing and  
releasing the connection between the connecting element  
(40, 45) and the closing system (5).
- 35

AMENDED PAGE

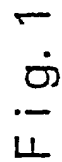
New claims  
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12. Device according to at least one of the preceding claims characterised by a locking pawl as blocking element.

AMENDED PAGE





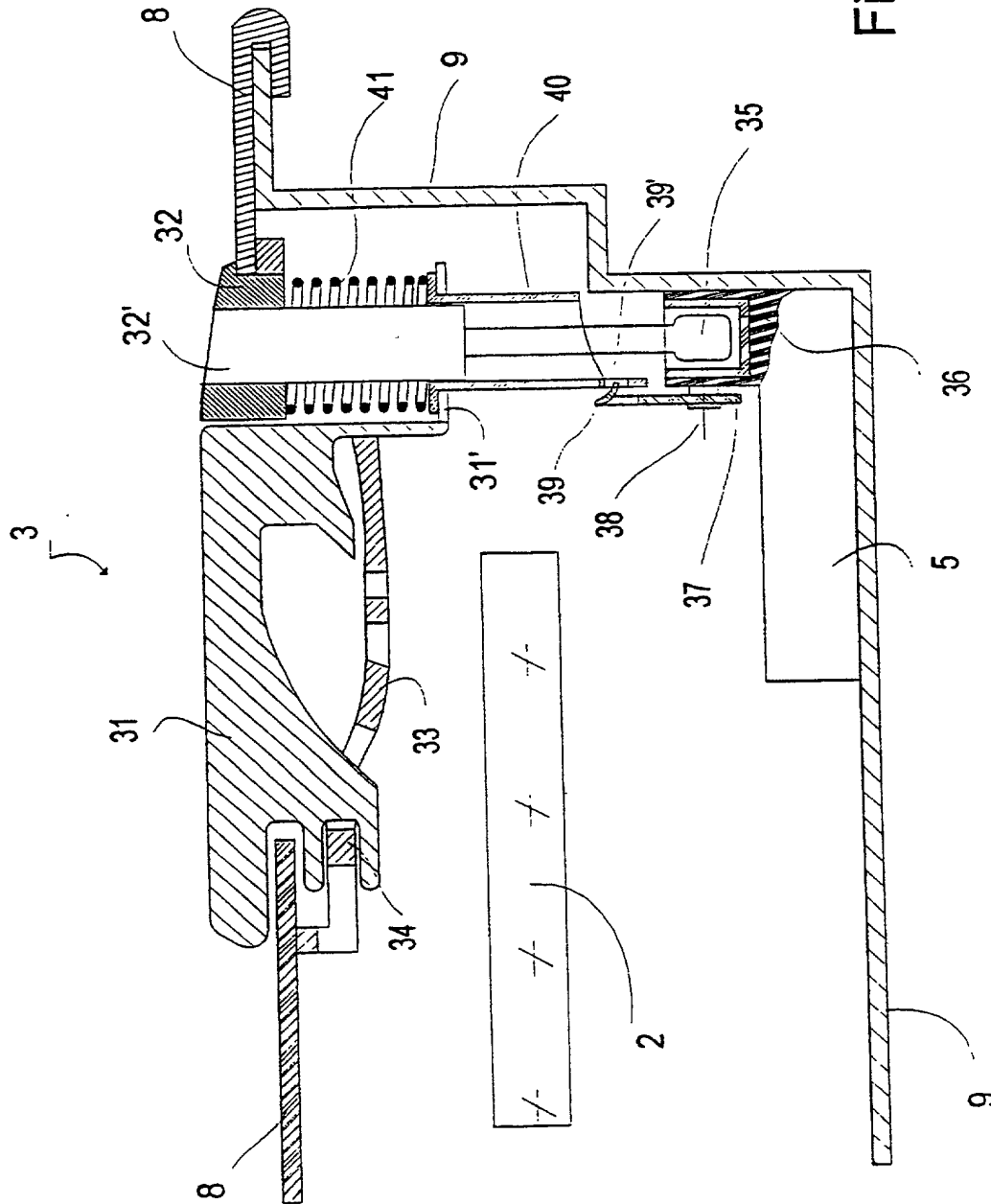


Fig. 2

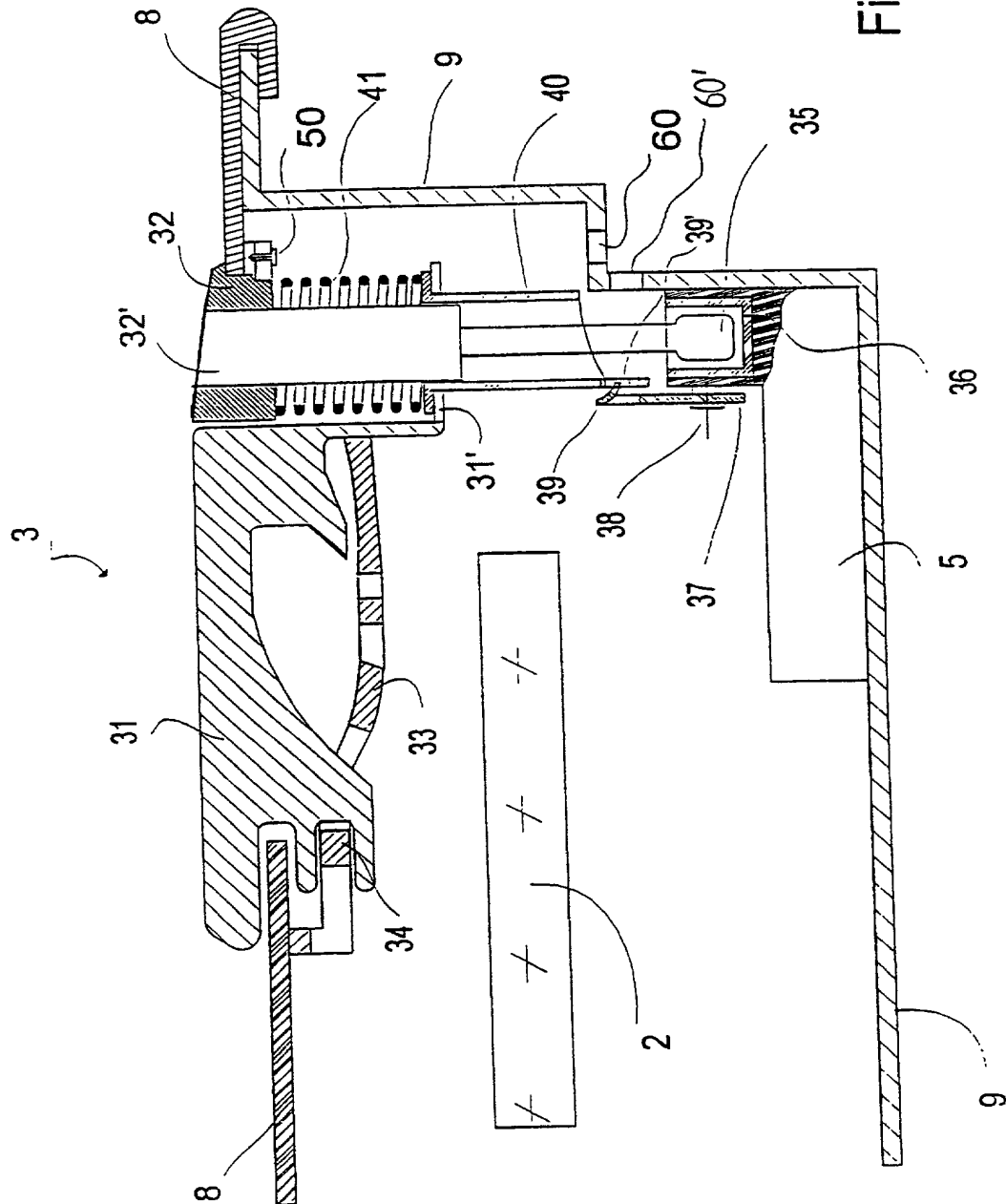


Fig. 2a

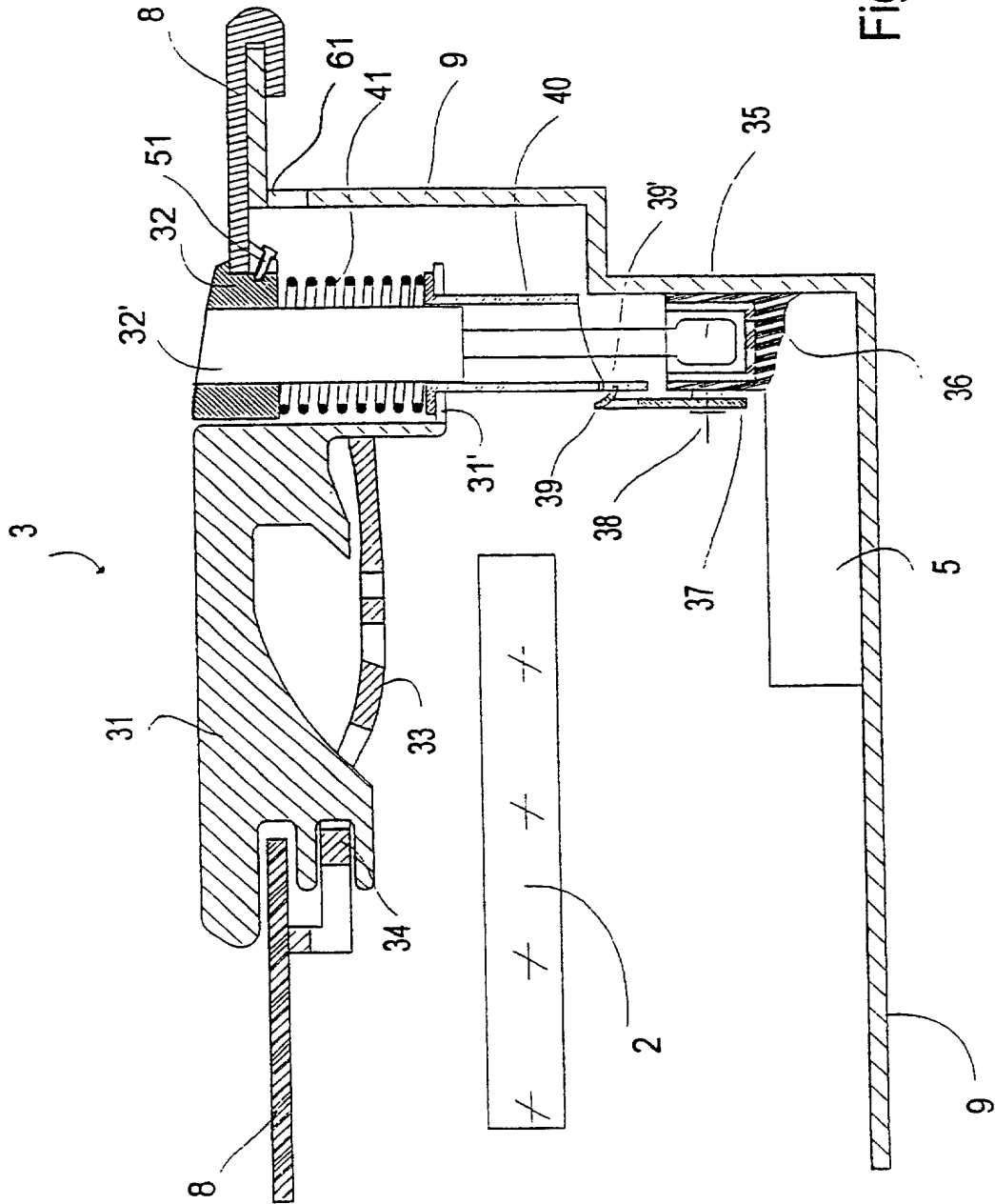


Fig. 2b

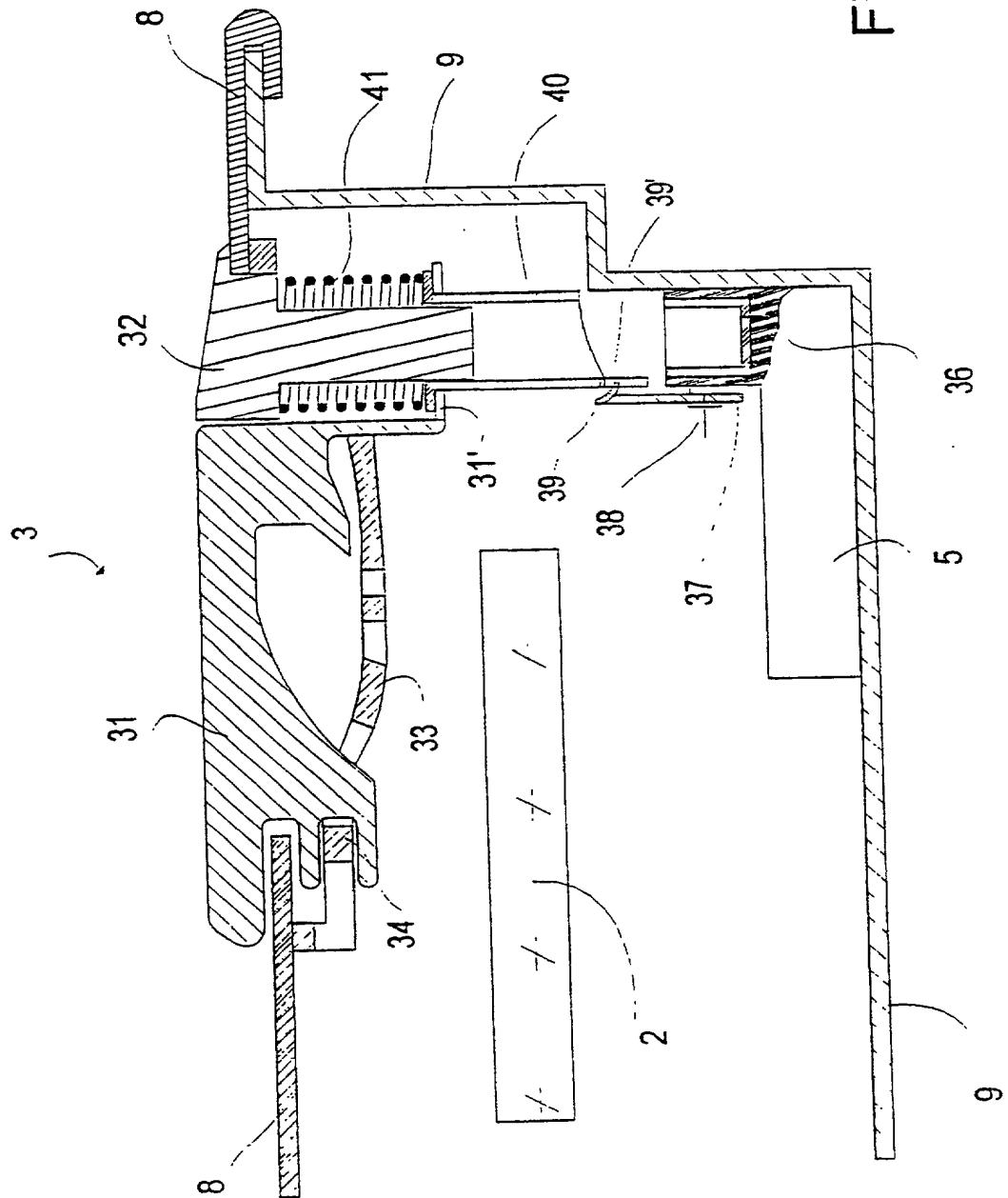


Fig. 2c

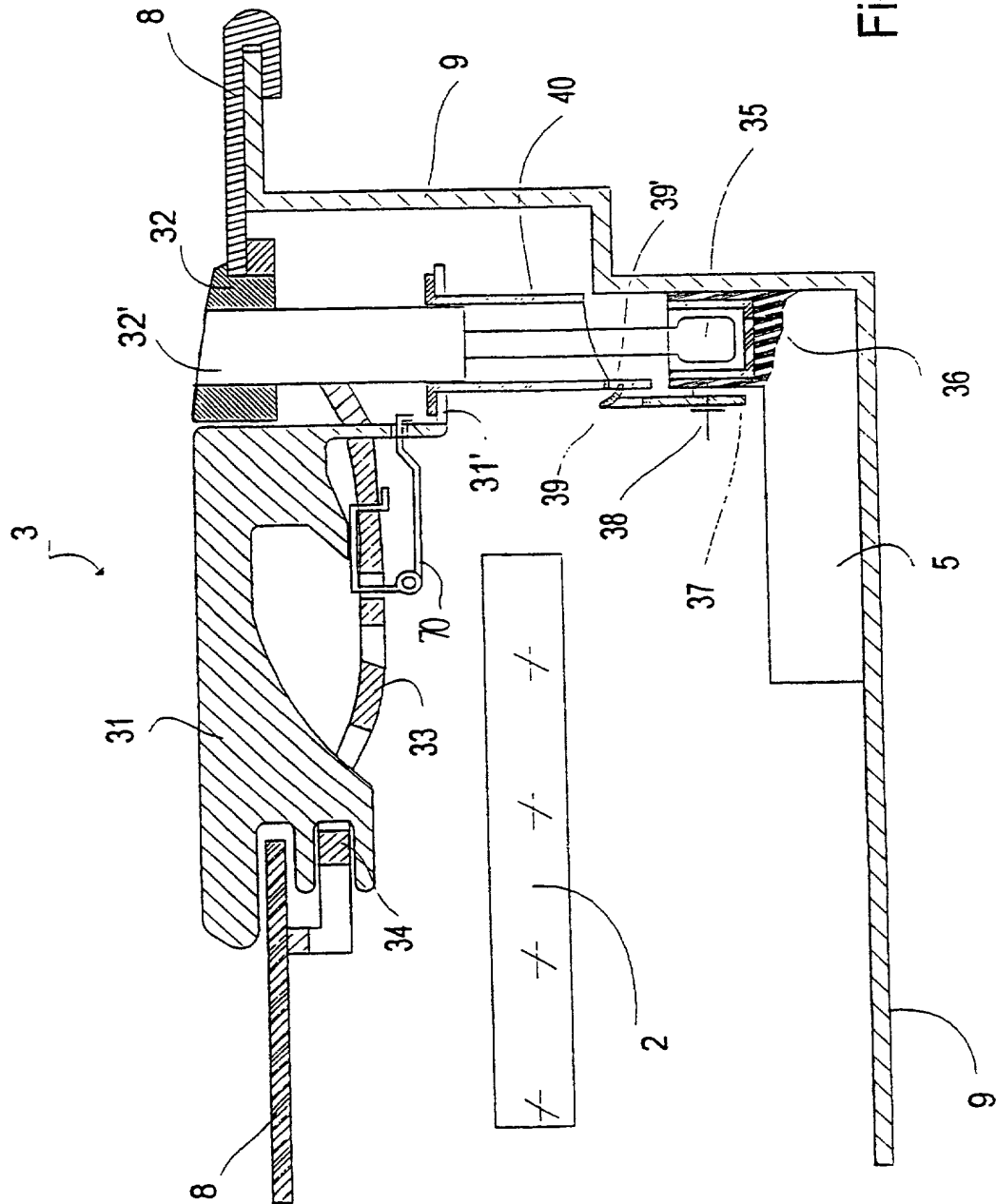


Fig. 2d

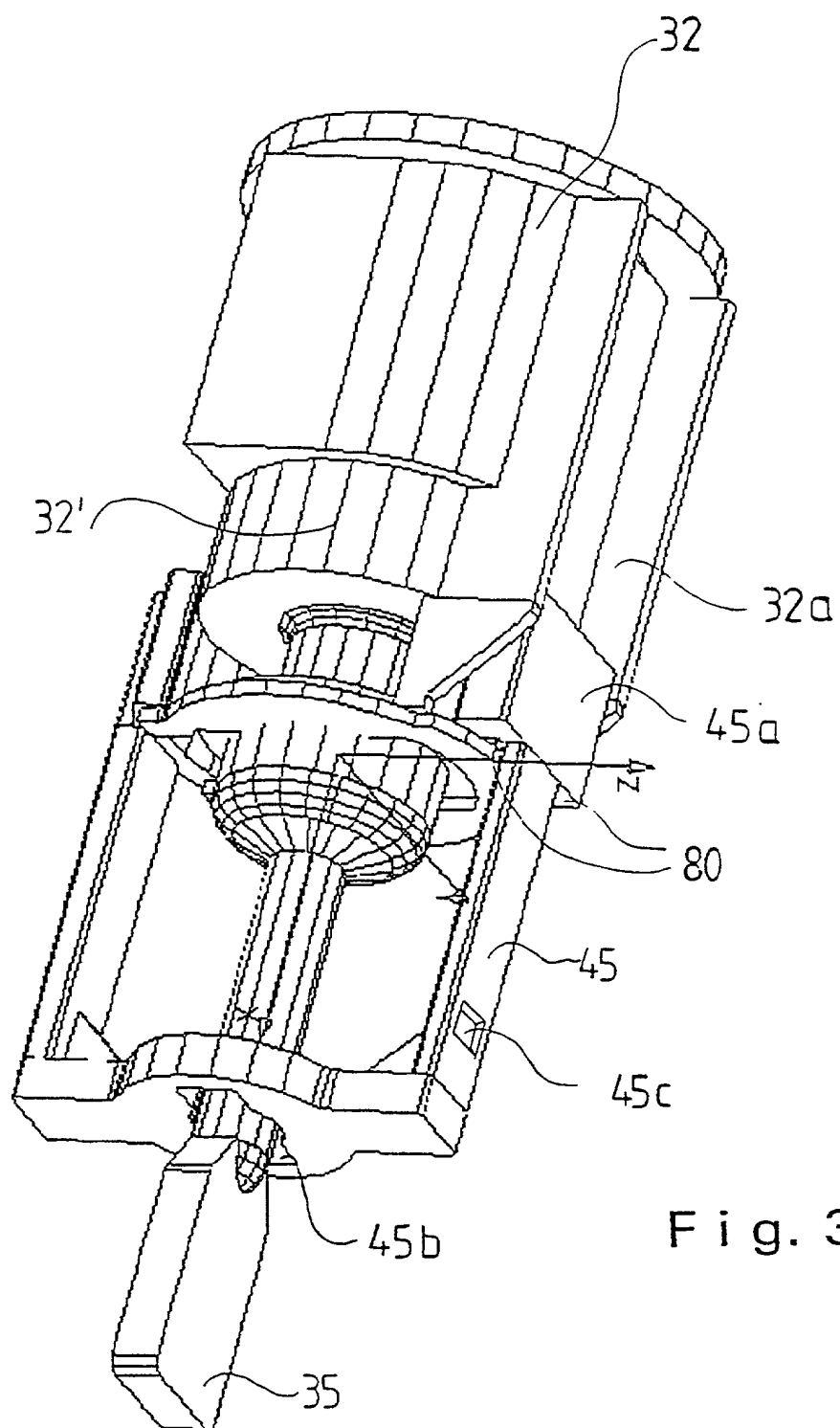


Fig. 3

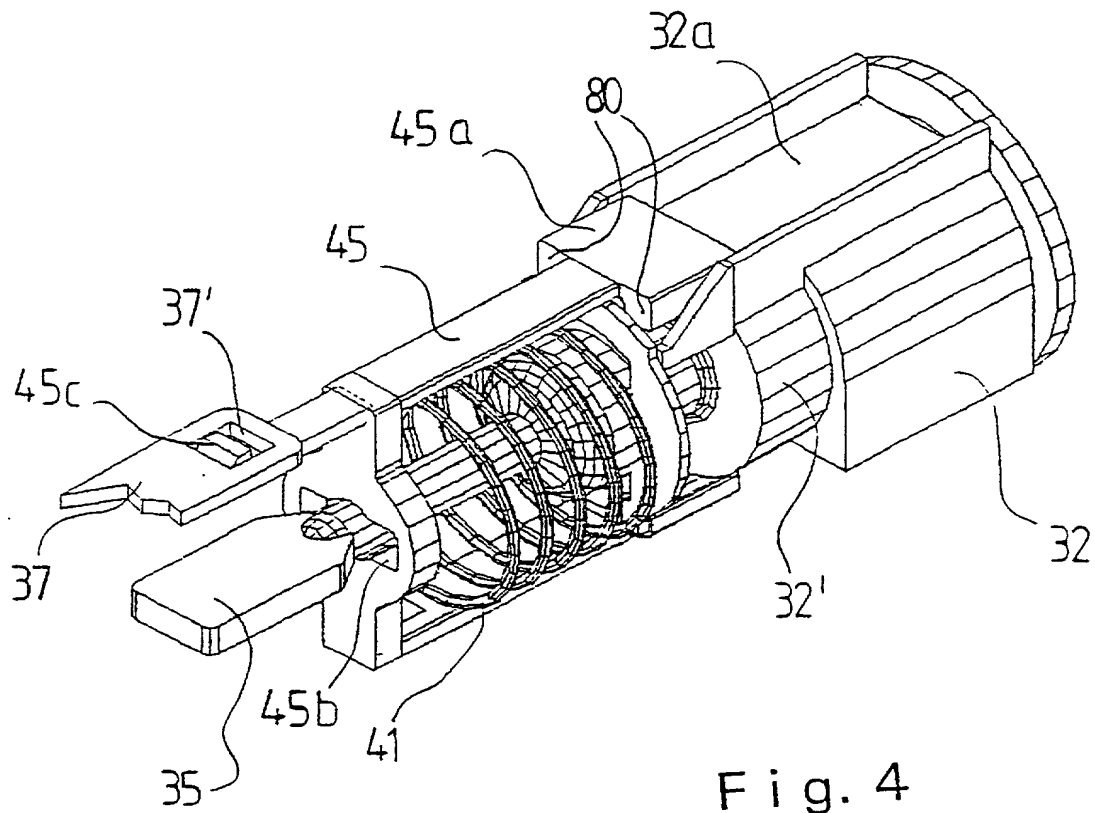


Fig. 4

DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS

PATENT

Docket No. : 40868/DBP/M521

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **DEVICE FOR CONNECTING AN EXTERIOR HANDLE TO A CLOSING SYSTEM**, the specification of which is attached hereto unless the following is checked:

X was filed on June 4, 1999 as United States Application Number or PCT International Application Number PCT/DE99/01696 and was amended on June 27, 2000 (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of the foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

<u>Application Number</u>	<u>Country</u>	<u>Filing Date (day/month/year)</u>	<u>Priority Claimed</u>
198 26 778.9	Germany	11/06/1998	YES

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

<u>Application Number</u>	<u>Filing Date</u>
---------------------------	--------------------

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

<u>Application Number</u>	<u>Filing Date</u>	<u>Patented/Pending/Abandoned</u>
---------------------------	--------------------	-----------------------------------

**POWER OF ATTORNEY:** I hereby appoint the following attorneys and agents of the law firm CHRISTIE, PARKER & HALE, LLP to prosecute this application and any international application under the Patent Cooperation Treaty based on it and to transact all business in the U.S. Patent and Trademark Office connected with either of them in accordance with instructions from the assignee of the entire interest in this application; or from the first or sole inventor named below in the event the application is not assigned; or from MAIKOWSKI



820 5252

DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS

PATENT

Docket No. : 40868/DBP/M521

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **DEVICE FOR CONNECTING AN EXTERIOR HANDLE TO A CLOSING SYSTEM**, the specification of which is attached hereto unless the following is checked:

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**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS**

**Docket No. 40868/DBP/M521**

& NINNEMANN in the event the power granted herein is for an application filed on behalf of a foreign attorney or agent.

R. W. Johnston	(17,968)	Gregory S. Lampert	(35,581)	Cynthia A. Bonner	(44,548)
D. Bruce Prout	(20,958)	Grant T. Langton	(39,739)	Jun-Young E. Jeon	(43,693)
Hayden A. Carney	(22,653)	Constantine Marantidis	(39,759)	Marc A. Karish	(44,816)
Richard J. Ward, Jr.	(24,187)	Daniel R. Kimbell	(34,849)	John F. O'Rourke	(38,985)
Russell R. Palmer, Jr.	(22,994)	Craig A. Gelfound	(41,032)	Richard J. Paciulan	(28,248)
LeRoy T. Rahn	(20,356)	Syed A. Hasan	(41,057)	Josephine E. Chang	(46,083)
Richard D. Seibel	(22,134)	Kathleen M. Olster	(42,052)	Frank L. Cire	(42,419)
Walter G. Maxwell	(25,355)	Daniel M. Cavanagh	(41,661)	Harold E. Wurst	(22,183)
William P. Christie	(29,371)	Molly A. Holman	(40,022)	Robert A. Green	(28,301)
David A. Dillard	(30,831)	Lucinda G. Auciello	(42,270)	Derrick W. Reed	(40,138)
Thomas J. Daly	(32,213)	Norman E. Carte	(30,455)	John W. Peck	(44,284)
Vincent G. Gioia	(19,959)	Joel A. Kauth	(41,886)	Stephen D. Burbach	(40,285)
Edward R. Schwartz	(31,135)	Patrick Y. Ikehara	(42,681)	David B. Sandelands, Jr.	(46,023)
John D. Carpenter	(34,133)	Mark Garscia	(31,953)	Heidi L. Eisenhut	(46,812)
David A. Plumley	(37,208)	Gary J. Nelson	(44,257)	Nicholas J. Pauley	(44,999)
Wesley W. Monroe	(39,778)	Raymond R. Tabandeh	(43,945)	Mark J. Marcelli	(36,593)

The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

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**SEND CORRESPONDENCE TO : CHRISTIE, PARKER & HALE, LLP**  
**P.O. Box 7068, Pasadena, CA 91109-7068**

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first joint inventor <b>ROLF BUCKER</b>	Inventor's signature	Date
Residence and Post Office Address <b>Lauterburgstrasse 10b, 96450 Coburg, Germany</b>		Citizenship <b>Germany</b>

Full name of second joint inventor <b>EBERHARD PLEISS</b>	Inventor's signature <i>Eberhard Pleiss</i>	Date <b>2000-11-14</b>
Residence and Post Office Address <b>Bahnhofstrasse 71, 74193 Schwaigern, Germany</b>		Citizenship <b>Germany</b>

220520

DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATIONS

Docket No. 40868/DBP/M521

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Full name of sole or first joint inventor ROLF BUCKER	Inventor's signature <i>[Signature]</i>	Date 10.11.00
Residence and Post Office Address Lauterburgstrasse 10b, 96450 Coburg, Germany		Citizenship Germany

Full name of second joint inventor EBERHARD PLEISS	Inventor's signature <i>[Signature]</i>	Date
Residence and Post Office Address Bahnhofstrasse 71, 74193 Schwaigern, Germany		Citizenship Germany